



RETAIL LIGHTING SOLUTION

**STIMULATING SUPERMARKETS**

**SLO**<sup>®</sup>  
smart lighting engineering



CONCEPT

BENEFITS  
IN EACH AREA

FUNCTIONALITY

CONTROL SYSTEM

SUPERMARKET  
LIGHTING DESIGN  
ELEMENTS

ENERGY SAVING

# STIMULATING SUPERMARKETS

## RETAIL LIGHTING SOLUTION

Each supermarket exists in a competitive environment, thus as a business it requires modern, cost-effective and stimulating lighting to achieve its goals. When designing successful supermarket lighting many elements need to be considered, such as colour rendition, reflection, contrast, and energy efficiency. Colour perception is one the most important visual parameters in a retail environment as it influences the opinion of goods, buying decisions, and also determines the overall impression of the store itself.

Applying different modules inside the luminaires with various colour temperatures and colour points enhance the attraction of products by supporting their natural colours and highlighting certain tones. With professional food lighting supermarkets are able to foster the in-store experience and attain customer loyalty as well. On the other hand, creating contrast ensures proper attention for the merchandise and gives guidance through the areas of the store that helps customers feel more comfortable.

Choose the easiest way to reduce the environmental footprint by installing a customised, energy efficient LED lighting solution with a smart control system.

Welcome to **Stimulating Supermarkets solution by SLE!**



“ Emphasize the freshness of products and stimulate purchase behaviours

## CONCEPT

### DISTINCTIVE STORE IMAGE

Beside its functional value, lighting is a key factor in creating a distinctive image of the store and highlighting the brand. It is not only enhancing the look and appeal of the merchandise, but also affects the feeling of the space itself. A modern lighting solution will contribute to the supermarket's business performance to a great extent.

### LIGHT CONTROLS

A supermarket requires not only the right lighting for each specific area but also an easy-to-manage system with sensors that guarantee energy saving. Presence detectors are implemented in the storage area, in the refrigerator room and in the offices to make sure lighting is used only where needed. At the same time, daylight sensors ensure the maximum usage of available natural light for the visual comfort of customers and staff. Time-based control is ideal for the automatic switching and dimming of lighting according to a schedule using pre-defined lighting scenes, for instance at cleaning and restocking.

### EFFICIENCY

Refrigeration and lighting account for over 50 percent of total energy use in the average supermarket. By combining the latest energy efficient technology and lighting design with smart controlling of the system, SLE provides a sustainable solution that guarantees keeping the monthly energy bills low and that is easy to maintain in the long run.

100%  
EXPERTISE

2700K



5000K

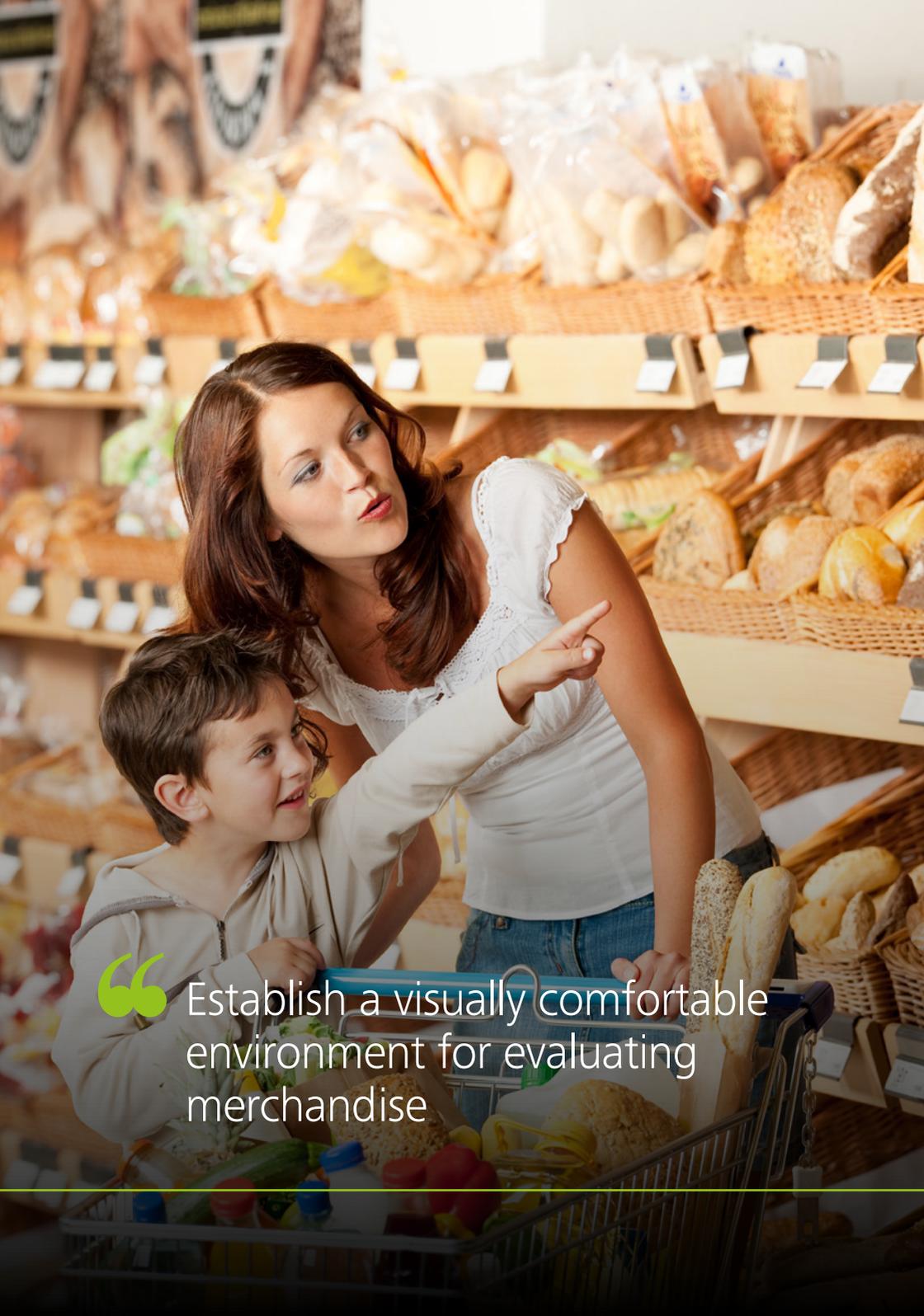
### LIGHT QUALITY

Good quality lighting in a supermarket is able to help customers to make the right buying decisions and, at the same time, creates a pleasant shopping environment that stimulates purchase behaviours. Next to perfect colour rendition, applying the right light with appropriate colour temperature for fresh products such as fish, meat, bread, pastry, fruits and vegetables is essential. Thus these areas are illuminated using specific Food Colours LED luminaires with high CRI values.

CRI 70



CRI 90



“ Establish a visually comfortable environment for evaluating merchandise

### SHELF ILLUMINATION

Continuous lighting lines with LED technology are ideal for open spaces in the store, arranged parallel to the shelving. Positioned centrally over the aisles, the fixtures utilize double asymmetric reflectors that direct light onto the shelves and floor, providing an ideal amount of vertical illumination. This way no light is wasted, therefore fewer light sources are needed to provide sufficient levels of illumination, bringing savings of up to 40%.

### FRUITS & VEGETABLES

The fruit and vegetable section often takes centre stage at the entrance. The colours of fresh, appetising green produce tempt customers and turn their minds to buying. The CCT (correlated colour temperature) of FRUIT module is ideal to support the vibrancy of rich natural colours and ensures that customers can easily assess the quality of the items.

### MEAT & COLD CUTS

A warm white full spectrum light rich in red tones enhances the natural colour of the meat. Light sources with MEAT module inside are ideal for highlighting the freshness of displayed meat products while ensuring that white elements remain naturally white. The extra MEAT+ is recommended to emphasize red colour tones even more.

2700K



3000K



3500K



5500K



## BENEFITS IN EACH AREA

**100%**  
EFFECTIVE

### BREAD, PASTRIES & CHEESE

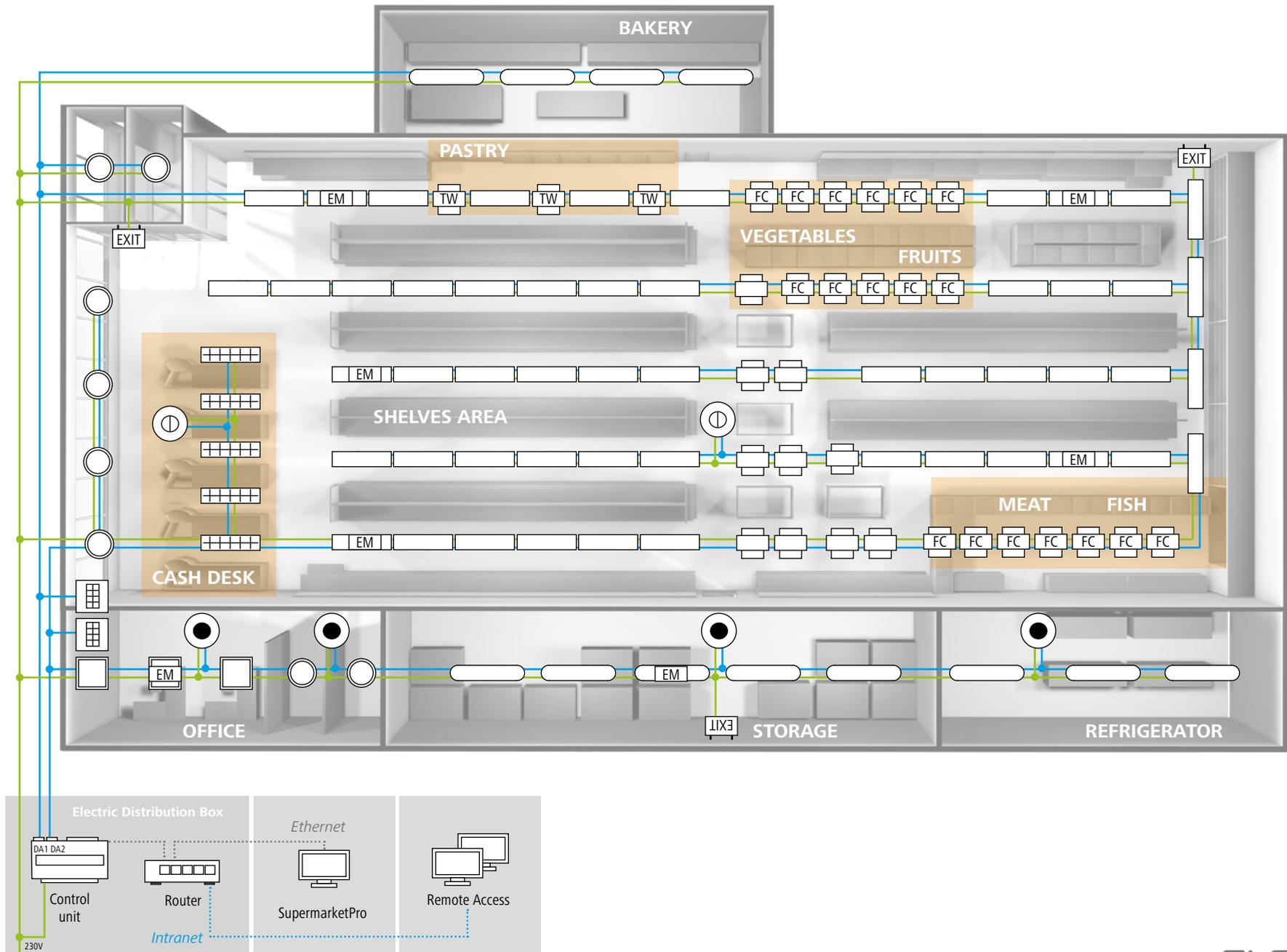
Few things are more tempting than freshly-baked goods and tasty cheese. Often bought on impulse, they positively influence a supermarket's turnover. The warm, brownish shades of GOLD CCT add a crispy look, enhancing the colour, while with the golden shades of GOLD+ we can achieve the "fresh out of the oven" appearance to make sure bakery products cannot be overlooked

### FISH, FROZEN PRODUCTS & DAIRY

Such products are displayed in special cabinets that are maintained at low temperatures. It is therefore beneficial to use the cool white light of the FISH module to support the perception of freshness. Cut fish with red flesh, however, looks best under warmer colour lighting. Whether cold or warm, the lighting should provide good rendition of reds and whites to bring out the best in all colours.

# FUNCTIONALITY

-  LED Luminaire  
IP Protection
-  Downlight  
LED Luminaire
-  Recessed  
LED Luminaire
-  Line LED Luminaire
-  Line LED Luminaire  
Anti glare grid
-  Spot LED Luminaire  
Tunable white
-  Spot LED Luminaire  
Food colours
-  Spot LED Luminaire
-  Emergency
-  Exit
-  Daylight sensor
-  Motion sensor
-  Keypad controller  
- Luminaire
-  230V
-  DALI



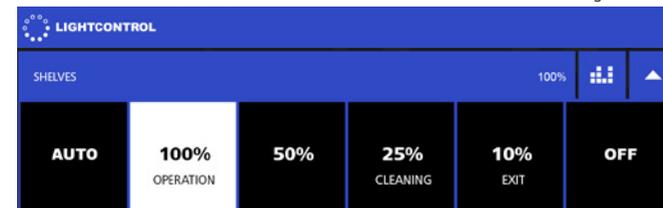
# CONTROL SYSTEM

## GRAPHIC USER INTERFACE

SupermarketPro is an easy-to-control Light Management System (LMS) equipped with sensors to guarantee energy saving. It is controlled through the Graphic User Interface that is customised according to the specific supermarket solution. This advanced platform is designed to monitor and manage the lighting system. Its key modules make it possible to automatically collect, store and process data, schedule switching, generate reports about the system status and savings, and send notifications about failures and system errors. The software is a reliable and effective tool that helps to reduce operational costs and improve system performance.

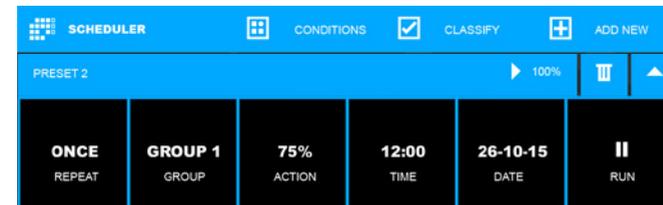
### BASIC SOFTWARE MODULES

1. Light control



**100%**  
UP TO DATE

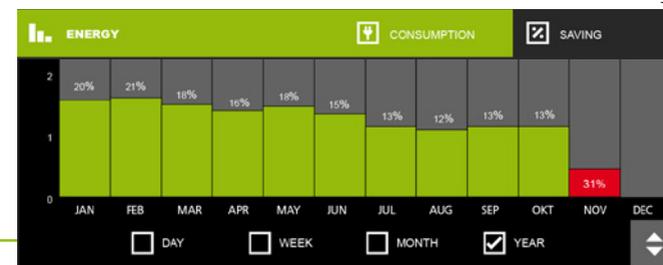
2. Scheduler



3. Alerts

| ALERTS       |       |          | LAMP FAILURE [5] | LUMINAIRE LOST [5] | SYSTEM |
|--------------|-------|----------|------------------|--------------------|--------|
| LUMINAIRE 2  | 15:15 | 04-04-15 |                  |                    |        |
| LUMINAIRE 21 | 15:15 | 04-04-15 |                  |                    |        |
| LUMINAIRE 22 | 15:15 | 04-04-15 |                  |                    |        |

4. Energy



“ Create a visual journey for shoppers with professional lighting



## SUPERMARKET LIGHTING DESIGN ELEMENTS

**100%**  
EFFICIENCY

*Supermarkets are places where customers can find everything they need for their daily lives under one roof. As shopping is an emotional and sensory activity in which lighting plays a key role, it is vital that the lighting is designed with the utmost care and thought.*

### GENERAL LIGHTING

General lighting is the main source of illumination in a store, providing uniform lighting that allows for customer circulation throughout the space, and for the staff to perform daily tasks. Diffused general lighting ensures a sense of well-being that makes customers feel comfortable and more likely to stay longer in the store.

### REFLECTION

Various surfaces within the space reflect light back, causing higher illuminance levels that should be calculated with when designing the lighting of a store. In addition to lowered energy costs, white and light-reflective surfaces help to reduce shadows from racks and stacked goods.

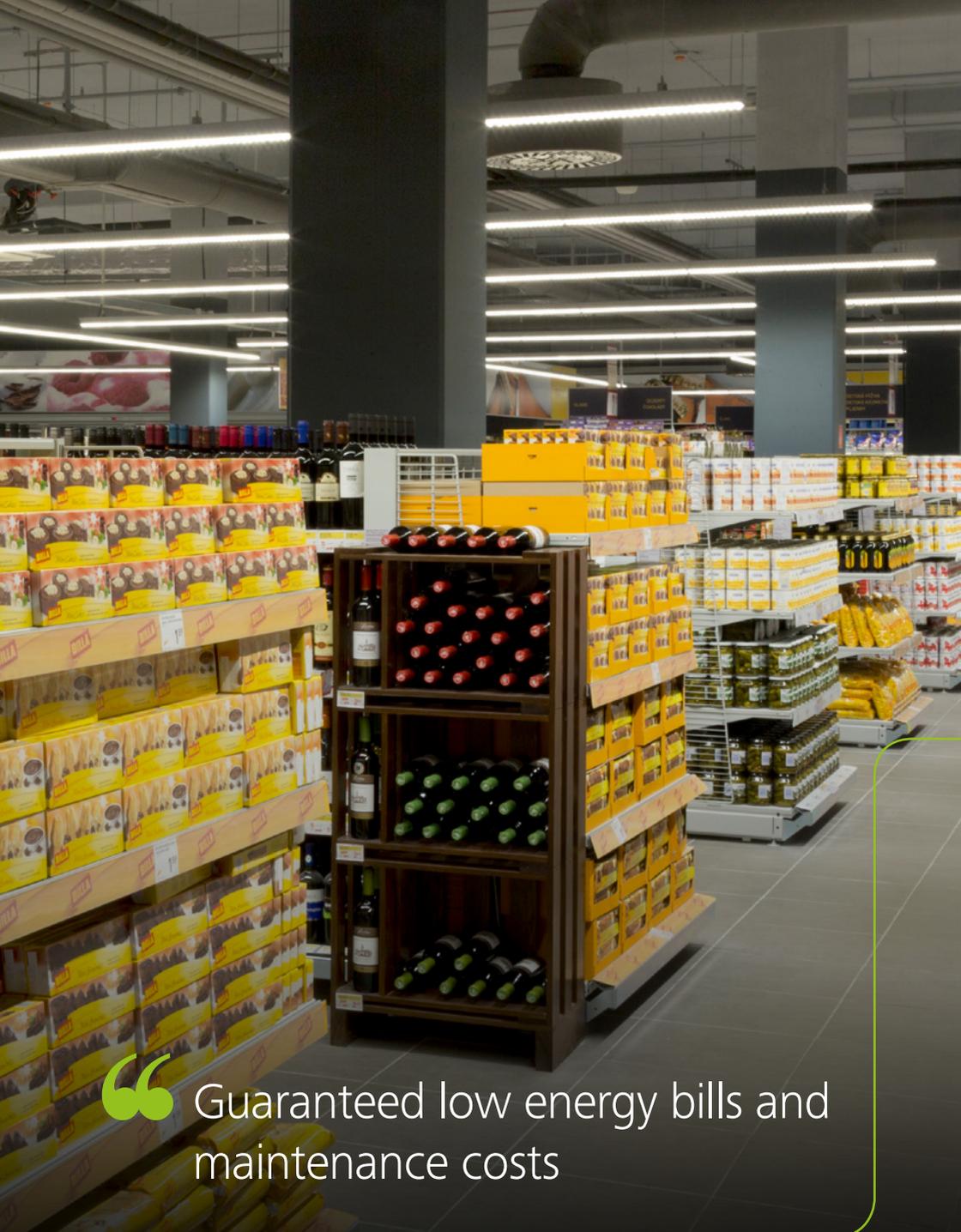
### CONTRAST

With contrast it is possible to create visual hierarchies within the retail environment. It is achieved by using an increased illumination to emphasize featured merchandise against the general light levels. Incorporating the recommended light levels and contrast ratios, the result is a space with high visual interest, depth, and dimension.

### TASK AREA LIGHTING

Focused, higher level of illumination is required for specific areas such as counters and cash desks. Completing the sale is the most important retail task, so it is essential to enable the quick and accurate flow of payments, measurements, and the reading of tags. For this, shadows and glare need to be eliminated and we need to calculate the ideal illumination level, taking contrast levels into account between the task area and the general lighting.

“ Enhance the in-store experience with professional lighting design

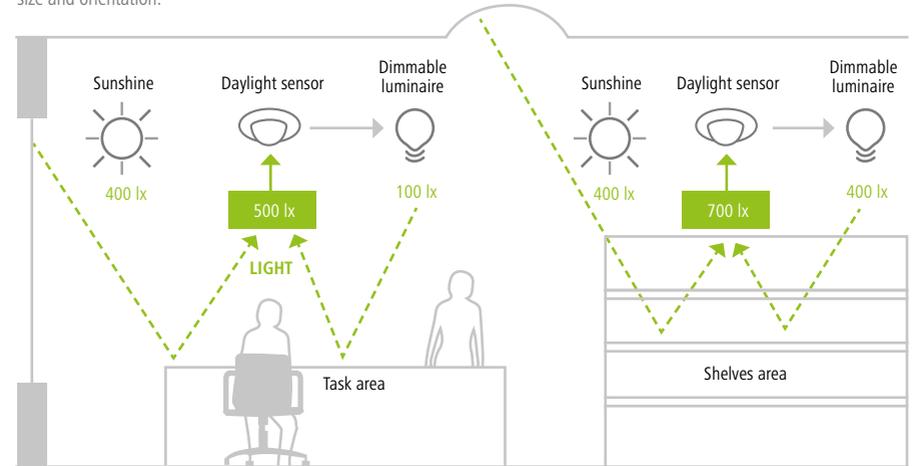


“ Guaranteed low energy bills and maintenance costs

# ENERGY SAVING

## LIGHT INTENSITY SENSING

The effectiveness of lighting management based on light intensity sensing is determined by the availability of daylight and illumination rate of the given space. The illumination rate depends on the geographical position, window and skylight size and orientation.



## SUPERMARKET MODEL SITUATION - new installation

Ground area:  
961 m<sup>2</sup>

Luminaires pieces:  
139 pcs

Operations:  
5,840 hours per year

Price for electricity:  
0.15 €/kWh

Ambient temperature:  
25 °C

### Standard solution

Dimmable T5 luminaires  
Power consumption: **105 W**  
Lumen output: **7,338 lm**  
Lifetime: **18,000 hours**  
Efficacy: **70 lm/W**  
Power consumption (LMS): **85,235 kWh**  
CO<sub>2</sub>: **32.4 t/year**  
Investment: **24.94 €/m<sup>2</sup>**

### SLE solution - SMART L

Dimmable LED luminaires  
Power consumption: **37 W**  
Lumen output: **5,600 lm**  
Lifetime: **50,000 hours**  
Efficacy: **152 lm/W**  
Power consumption (LMS): **21,025 kWh**  
CO<sub>2</sub>: **11.4 t/year**  
Investment: **44.86 €/m<sup>2</sup>**

Payback time: **2 years**

Saving: **8.62 €/m<sup>2</sup>**

Total saving: **9,631.53 €**



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